

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

01/27/98

APPLICATION NUMBER FIRST NAMED APPLICANT ATTORNEY DOCKET NO. FILING DATE 08/466.894 06/06/95 HARVEY J 5634.276 EXAMINER LM11/0127 THOMAS Ĵ SCOTT JR HOWREY & SIMON ART UNIT PAPER NUMBER 1299 PENNSYLVANIA AVENUE NW WASHINGTON DC 20004 2737 DATE MAILED:

COMMISSIONER OF PATENTS AND TRADE	
	OFFICE ACTION SUMMARY
Responsive to communication(s) filed on _	b/4/95
☐ This action is FINAL.	/ /
Since this application is in condition for allo accordance with the practice under Ex par	owance except for formal matters, prosecution as to the merits is closed in the Quayle, 1935 D.C. 11; 453 O.G. 213.
whichever is longer, from the mailing date of the	month(s), or thirty days, is communication. Failure to respond within the period for response will cause S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR
Disposition of Claims	
X Claim(s) <u> </u>	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
XI Claim(s) 2-24	is/are rejected.
Claim(s)	is/are objected to.
Claims	are subject to restriction or election requirement.
Application Papers	
See the attached Notice of Draftsperson	's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on	is/are objected to by the Examiner.
☐ The proposed drawing correction, filed o	n is \square approved \square disapproved.
☐ The specification is objected to by the E	xaminer.
☐ The oath or declaration is objected to by	the Examiner.
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for fe	oreign priority under 35 U.S.C. § 119(a)-(d).
•	RTIFIED copies of the priority documents have been
received.	
received in Application No. (Series Co	de/Serial Number)
	ion from the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	
	omestic priority under 35 U.S.C. § 119(e).
Attachment(s)	, , , , , , , , , , , , , , , , , , , ,
Notice of Reference Cited, PTO-892	
☐ Information Disclosure Statement(s), PT	O-1449 Paper No(s)
☐ Interview Summary, PTO-413	1.
☐ Notice of Draftsperson's Patent Drawing	Review. PTO-948
Notice of Informal Patent Application, P	
	OFFICE ACTION ON THE FOLLOWING PAGES

PTOL-326 (Rev. 10/95)

* U S GPO: 1996-409-290/40029



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DETAILED ACTION

1. This Office Action is responsive to the amendment(s) filed 6/6/95 and 12/4/95.

DOUBLE PATENTING V.S. PATENTS

- After reviewing the restriction requirement in US Patent 5,233,654 it is believed that the claims of the instant application are subject to a double patenting analysis against US Patent 5,233,654 and US Patent 5,335,277.
- In view of further analysis and applicant's arguments, the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action has been withdrawn.
- 4. The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985) *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 13-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 5,335,277 in view of Haselwood et al. (U.S. Patent No. 4,025,851).

Claim 14 of the '277 patent disclosed a television receiver station comprising a plurality of receiver/distributors ("a broadcast or cablecast receiver"), a storage device ("a data storage device"), a processor ("a control signal detector") for receiving programming identification signals ("one or more instruct signals"), a controller ("a computer") and an output device for transmitting ("a transmitter") television programming to a remote subscriber station. The steps of "receiving data", "receiving one or more instruct signals" and "transferring data and one or more instruct signals to a transmitter" are inherent steps of claim 14 of the '277 patent since lines 1-6 of claim 14 of the '277 patent indicates that the receiver receives a television programming transmission ("information transmission") comprising a television programming ("data or program material") and programming identification signals ("one or more instruct signals"). That

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is, in order for the receiver to receive the television programming transmission comprising a television programming and programming identification signals, the transmission must be transmitted from a transmitter station, and in order for the transmitter station to transmit such transmission, the television programming ("data or program material") and the programming identification signals ("one or more instruct signals") must be first received by the transmitter station and then transferred to the transmitter for transmission to the receiver station. As disclosed in lines 22-31 of claim 14 of the '277 patent, the controller compares the received identification signals ("one or more instruct signal") to previously received scheduled program information ("a transmission schedule") to direct the output device to transmit the television programming to a remote subscriber station. Therefore, the programming identification signals ("one or more instruct signal") are effective to transmit the television programming according to a transmission schedule.

Claim 14 of the '277 patent differs from claims 13-22 of the present invention in that claim 14 does not specifically disclose the step of logging the transmission of the program.

However, as taught by Haselwood et al (Haselwood), monitoring the program broadcasted by a broadcasting station is notoriously old and extremely well known in the art of television.

Haselwood in col. 2, lines 10-15, and col. 5, line 50 to col. 6, line 5 clearly suggests the step of logging the transmission of the program. Haselwood in Figs. 2 and 3 further illustrates that the monitoring can be done in either the receiving site or the transmission site. Since both claim 14 Haselwood are directed to a CATV system, it would have been obvious to an artisan of ordinary

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skill at the time of the invention to incorporate the logging feature of Haselwood into the receiver station of claim 14 of the '277 patent in order to allow the broadcast station to maintain a log of all the programs that have gone to air so that the broadcast station can utilize such collected information for the purposes of billing, determining viewing habits of the subscribers, etc.

DOUBLE PATENTING BETWEEN APPLICATIONS

6. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033

25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938

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85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680 .	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217

145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626

205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059

271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277 .	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

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requiring millions of claim comparisons.

7. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 328 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the attached Appendix are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

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INFORMATION DISCLOSURE STATEMENTS

Receipt is acknowledged of applicant's Information Disclosure Statements filed 12/4/95, 4/5/96 and 4/7/97. In view of the unusually large number of references cited in the instant application (approximately 2,200 originally and 645 in the subsequent IDS) and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

The foreign language references cited therein where there is no statement of relevance or no translation are not in compliance with 37 C.F.R. 1.98 and have not been considered.

Numerous references listed in the IDS are subsequent to applicant's latest effective filing date of 9/11/87, therefore, the relevancy of these references is unclear. Also cited are numerous references that are apparently unrelated to the subject matter of the instant invention such as: US Patent # 33,189 directed toward a beehive, GB 1565319 directed toward a chemical compound, a cover sheet with only the word "ZING", a computer printout from a library search with the words "LST" on it and a page of business cards including that of co-inventor James Cuddihy, among others. The relevancy of these references cannot be ascertained. Furthermore, there are several database search results listed in foreign languages (such as German) which list only the title and document information; no copy has been provided, therefore, these references have not been considered.

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9. Claims 2-24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

37 C.F.R. 1.75(d)(1) requires that:

"the terms and the phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description".

The following limitations were not supported by the specification as originally filed:

In claim 2, "inputting a signal and a transmission schedule associated with said signal, said schedule comprising at least two of (1) a time at which to transmit said signal; a channel on which to transmit said signal; and (3) a code designating said signal", "transmitting said signal according to a said schedule", "selecting said code" and "logging the transmission of said signal".

In claim 3, lines 1 and 2, it is not clear where the terminology "potential user" of the recitation "potential user station(s)" finds clear support or antecedent basis in the written description as is required by 37 C.F.R. 1.75(d)(1). Similar clarification is needed throughout the claims (e.g. claim 8).

With respect to claim 3, it is maintained that the recitation of "one or more instruct signals which..." in line 6 of the claim explicitly requires that there be support in the original disclosure for two implementations of alleged invention; i.e., one in which the recited steps and functions are achieved in response to only one instruct signal and one in which the recited steps and functions are achieved in response to a plurality of instruct signals. It is not clear where the original

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disclosure provided support for these two alternative implementations of the recited method.

Similar clarification is needed throughout the claims.

With respect to claim 3, it is not clear where the original disclosure provides support for the recited "method of processing signals to control a plurality of potential user stations" wherein the recited method actually comprised a step in which "one of the group consisting of: (1) a time at which to communicate a first of said one or more instruct signals; and (2) a memory location to which to communicate a first of said one or more instruct signals" was "selected" [see the statement "said method comprising the steps of:" in lines 2 and 3 of claim 3 followed by the recited "step of selecting" in lines 9-13 of claim 3]. More specifically, the examiner maintains that the recitations of claim 3 require that there be support in the original disclosure for a method which actually comprised a specific step in which a selection was actually made between a time at which to communicate the first instruct and a location to which to communicate the first instruct signal; i.e., this being different from a method in which instruct signals were communicated either at a selected time *OR* to a selected memory location (a method in which the term "OR" represents different ways in which the communication step was carried out rather than an actual step in which one of said different ways "selected"). Clarification is required.

In claim 8, lines 10 and 11, it is not clear where the statement "being potentially different" finds clear support or antecedent basis in the written description as is required by 37 C.F.R. 1.75(d)(1).

It is not clear where the disclosure as originally filed provided support for the recited method of claim 8 in which a control signal was comprised of a *translated* instruction signal and:

1) interacted with predetermined user data to direct a processor at a potential user station to

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transmit a program containing video information according to a transmission schedule; 2) interacted with predetermined user data to direct a processor at a potential user station to log the transmission of said program; and 3) was stored in conjunction with said program.

With respect to the recitations of claims 9 and 10, it is not clear where the disclosure as originally filed provided support for the recitation of the instruct signal recited in claim 8, e.g. which is encoded to form the recited control signal, and which further: 1) effects a user station to transmit a program containing video information according to a transmission schedule; 2) effects said user station to log transmission of said program; and 3) directs the processor of said user station to generate a video overlay coordinated with said video information in said program.

In claim 13, "receiving data to be transmitted and delivering said data to a broadcast or cablecast transmitter", "receiving one or more instruct signals which in said network are effective to transmit said data according to a transmission schedule and log transmission of said data", "transferring said one or more instruct signals to a transmitter", and "transmitting a broadcast or cablecast information transmission comprising said data and said one or more instruct signals"

In claim 15, "transmitting *directs* said broadcast or cablecast transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said one or more instruct signals concurrently".

In claim 16, "transmitting *directs* said broadcast or cablecast transmission to said plurality of receiver stations *at different times* and each of said plurality of receiver stations responds to said one or more instruct signal *at a different time*".

In claim 17, "receiving said data at a receiver in said broadcast or cablecast transmitter station, communicating said data unit from said receiver to a memory location, and storing said

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data unit at said memory location for a period of time prior to communicating said data unit to said transmitter".

In claim 18, "receiving a program to be transmitted and delivering said program to a transmitter", "receiving one or more instruct signals at said transmitter station, said one or more instruct signals in said network operate to transmit said data according to a transmission schedule and log transmission of said data", "transferring said one or more instruct signals to a transmitter", and "transmitting a broadcast or cablecast information transmission comprising said program and said one or more instruct signals"

In claim 20, "transmitting *directs* said broadcast or cablecast transmission to said plurality of receiver stations *at the same time* and each of said plurality of receiver stations receives or responds to said one or more instruct signals *concurrently*".

In claim 21, "transmitting *directs* said broadcast or cablecast transmission to said plurality of receiver stations *at different times* and each of said plurality of receiver stations responds to said one or more instruct signal *at a different time*".

In claim 22, "receiving said program at a receiver in said broadcast or cablecast transmitter station, communicating said program from said receiver to a memory location, and storing said program unit at said memory location for a period of time prior to communicating said program unit to said transmitter".

In claim 23, "receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at said plurality of receiver stations to transmit said instruct signal according to a transmission schedule and log transmission of said instruct signal", "transferring said instruct signal from said transmitter station to a transmitter", "receiving one or more control.

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signals at said transmitter station, said control signals designating at least one receiver station of said plurality of receiver stations in which said instruct signal is addressed' and "transferring said one or more control signals from said transmitter station to a transmitter, said transmitter station broadcasting or cablecasting said instruct signal and said one or more control signals to said plurality of receiver stations".

10. Claims 2-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of claim 2 is inconsistent with the body of the claim since the preamble recites "A method of processing signals" while the body of the claim does not contain any step of processing signals.

In lines 1 and 2 of claim 3, the term "potential user station" is confusing and indefinite.

Specifically it is not clear how a station can only have the "potential" of being a user station.

Similar clarification is needed throughout the claims.

In claim 3, line 8, the recitation "and and log transmission" is indefinite because it is not clear as to its intended meaning and/or scope. Does the recitation mean "and to log the"? Similar clarification is needed in lines 5 and 6 of claim 8, line 11 of claim 13, line 11 of claim 18, and line 9 of claim 23.

In claim 3, lines 16 and 17, the recitation "said first instruct signal" is confusing and is indefinite because it is not clear if it refers back to the first instruct signal which was

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communicated by the step recited in lines 14 and 15 or to the first instruct signal prior to its being communicated by the step of lines 14 and 15. Clarification is needed.

In claim 8, line 9, the term "said effect indicated by said instruction with said program" does not have clear antecedent basis and is indefinite because is not clear: how and in what way the effect is indicated by the instruction? and how and in what way the instruction is "with said program". Clarification is needed.

In claim 8, lines 12 and 13, the term "said program" is indefinite because it is not clear if it refers to the program which was received (line 3), to the program which was transmitted (line 5), or to some other program. Clarification is needed.

In claim 8, line 12, the recitation "said control signal from said encoding step" is indefinite because it is not clear if it refers back to the control signal of the encoding step which existed prior to the "interaction" recited in lines 9 and 10 or to the control signal of said encoding step which existed after the "interaction" of lines 9 and 10. Clarification is required.

In claim 9, lines 1 and 2, the recitation "supplemental program material is stored at the same location as said processor" is indefinite because: a) "said same location" has no antecedent basis; and 2) it is not clear how a processor can be stored at the same location as program material, in fact, it is not clear how a processor can be stored. Clarification is needed.

In claim 11, lines 7 and 8, "said product, service, or information presentation" has no antecedent basis and is indefinite.

In claim 13, lines 13 and 15; claim 14, line 1-2; claim 15, lines 3-4; and claim 16, lines 3-4, "said one or more instruct signals" is vague and indefinite because it is unclear whether it refers to "one or more instruct signals" of line 5 or "one or more instruct signals" of line 10.

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In claim 17, "said data unit" lacks antecedent basis.

In claim 17, lines 4-5, "said transmitter" is vague and indefinite because it is unclear whether it refers to "a transmitter" of line 6, "a broadcast or cablecast transmitter" of lines 8-9 or "a transmitter" of line 13.

In claim 18, lines 9-10, 12 and 14, claim 19, lines 1-2, claims 20 and 21, lines 3-4, "said one or more instruct signals" is vague and indefinite because it is unclear whether it refers to "one or more instruct signals" of lines 4-5 of "one or more instruct signals" of line 9.

The preamble of claim 23 is inconsistent with the body of the claim because the preamble recites "A method of controlling..." while the body of the claim does not contain any step of controlling.

In claim 23, line 5, the recitation "at least one of said plurality of receiver station[s] further including a transmitter" is confusing and appears to be inconsistent with the recitation of lines 7-9 because the recitation of lines 7-9 requires ALL of said receiver stations (not "at least one") to have comprised a transmitter for transmitting the instruct signal. In claim 23, lines 12-14, the recitation "designating at least one receiver station of said plurality of receiver stations in which said instruct signal is addressed" is also confusing and inconsistent with the recitations of lines 7-9 for similar reasons. Clarifications are needed.

In claim 23, line 5, "station" should be changed to -- stations --.

Applicant is asked to review all of the claims and to correct any section 112 problems which are similar to those exemplified above

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CLAIM REJECTIONS - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over "MICROPROCESSOR FOR CATV SYSTEMS" by E.O. Tunmann et al. (hereinafter "Tunmann") in view of Haselwood et al (U.S. Patent No. 4,025,851).

Tunmann discloses a microprocessor CATV system having a programmable unit (Fig. 1) which controls switches or a matrix switch (e.g., Fig. 6) for selecting programs from a plurality of sources (page, 71, col. 2). The programs are inputted ("inputting a signal") from satellite station or local origination station (page 71, col. 1, lines 28 to col. 2, line 21). The transmission

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schedule is inputted ("inputting a transmission schedule") either from local keyboard or a remote station via telephone line (Fig. 1 and page 72, col. 1). As disclosed on page 73, col. 2, the transmission schedule comprises a time (e.g., Monday, from 6:30 pm to 7:00 pm) at which to transmit the program and a channel (e.g., Ch 5 shall be carried on Ch 6 and Ch 9) on which to transmit the program. The discussion on page 70, col. 2, lines 8-11, page 71, col. 2, lines 19-21 and page 73, col. 2 indicates that the program is transmitted according to the schedule ("transmitting said signal according to said schedule").

Tunmann differs from claim 2 in that Tunmann does not specifically disclose the step of logging the transmission of the program. However, as taught by Haselwood et al (Haselwood), monitoring the program broadcasted by a broadcasting station is notoriously old and extremely well known in the art of television. Haselwood in col. 2, lines 10-15, and col. 5, line 50 to col. 6, line 5 clearly suggests the step of logging the transmission of the program. Col. 2, lines 10-15 and col. 5, line 50 to col. 6, line 5 also indicates that a program code ("a code designating said signal") can be used for identifying the program which has gone to air. Haselwood in Figs. 2 and 3 further illustrates that the monitoring can be done in either the receiving site or the transmission site. Since both Tunmann and Haselwood disclose a CATV system, it would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the logging step of Haselwood into the method of Tunmann in order to allow the broadcast station to maintain a log of all the programs that have gone to air so that the broadcast station can utilize such collected information for the purposes of billing, determining viewing habits of the subscribers, etc.

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13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn [US Patent No. 3,761,888].

I. Preface:

The examiner takes Official Notice that it was notoriously well known in the broadcast art for a local affiliate broadcast station to have comprised a programmable program sequencer which controlled the station so as to *automatically*¹ broadcast a sequence of programs according to an operator entered transmission schedule. While Flynn illustrates the configuration of such an automated affiliate station for use in an audio programming environment, the examiner maintains that those skilled in the art would have understood that the illustrated affiliate station configuration was likewise applicable for the automation of affiliate stations in a video broadcast environment; i.e. one skilled in the art would have recognized that one could have simply upgraded the illustrated audio processing circuitry with corresponding video processing circuitry.

II. The showing of Flynn:

As noted above, <u>Flynn</u> has been cited because it describes the configuration of an affiliate broadcast station (see figure 1) which included a programmable program sequencer (14) which, when programmed by the station's operator² with a desired

¹ The term "automatically" has been used throughout the rejection to indicate that, once programmed with a transmission schedule, said stations outputted and broadcasted sequences of programming without further input or intervention by the operator.

² It is noted that the <u>Flynn</u> patent did not explicitly state that said sequencer "14" was programmed with a transmission schedule that was entered by the operator. However, it is maintained that such operation was inherent in <u>Flynn</u> for the following reasons: 1) element 14 of <u>Flynn</u> was labeled "programmed sequence controller" wherein the label itself explicitly indicated that

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program transmission schedule³, enabled the station to automatically broadcast sequences of programming (e.g. radio programs) according to said operator entered program transmission schedule [note: lines 63-68 of column 1; lines 1-8 of column 2; lines 12 and 13 of column 2; and lines 1-15 of column 5]. More specifically, Flynn described an automated broadcast station which comprised:

a) a source of network programming (16) which supplied the broadcast station with network programs wherein the network programs were produced by a remote network station [see: lines 27-33 of column 4; and lines 1 and 2 of column 5];

b) a source of local programming (24,34) including storage devices (24,34) from which local programs were provided, reproduced, and selected as directed by the transmission schedule entered by the operator, each of the storage devices ("24" or "34") contained storage mediums ("28" or "38") on which both the local programs and control signals were stored wherein said control signals comprised cueing

sequencer 14 was programmable and had been "programmed"; 2) Flynn explicitly taught that sequencer 14 was programmed with a "preset program" which controlled the sequence in which programming was provided from the controlled program sources [note lines 7-10 of column 5] which, by definition, is a "program transmission schedule"; 3) the program sequence, or program schedule, was inherently subject to changes on a daily basis according to the station operator's broadcasting desires/needs which explains why the sequencer 14 was "programmable" as indicated by its label and which explains why said programming had to have been performed by said operator, and 4) the programmable sequencer 14 was of conventional design [see lines 12 and 13 of column 2 and lines 63-67 of column 4] wherein such conventional sequencer were known to have been programmed by the operator.

The Flynn patent used the term "preset program" so as to have referred to information contained within program sequencer "14" which defined the order in which mass medium programming was selected, outputted, and broadcasted by the station [see lines 1-10 of column 5]. Such a "preset program", by definition, comprised a "program transmission schedule".

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signals for marking the beginning and end of the recorded local programs and tag data for identifying the recorded local programs as to type and content, were stored. Significantly, the stored control signals in Flynn served a dual purpose in that they were used by the recording devices to locate where the selected local programs which were to have been reproduced were stored on the recording mediums and, when reproduced with the selected local programs, were also used by a logger "50" in order to have identified and logged those local programs which were reproduced and broadcasted from said station (see the discussion in column 1 and the discussion which begins in line 36 of column 5 and extends to line 19 of column 7);

c) said programmed sequence controller "14" which:

and

- 1) turned on, started, and stopped said recording devices so as to direct the recording devices to reproduce the selected ones of the local programs in the order/sequence that was defined by the program schedule contained within said sequencer [note lines 1-10 of column 5];
- 2) provided the information to the recording devices of the local source that was needed in order to have identified the ones of the stored local programs which were to have been selected and reproduced according to the sequence defined by said program schedule [see lines 4-7 of column 5];

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3) selectively switched among the outputs of the both the network and

local sources of mass medium programming, according to the stored

program schedule, thereby selectively connecting one of the local and

network programs supplied by said sources to transmitter "10" for

broadcast [see lines 1-7 of column 5];

d) said program logger "50" which operated so as to have produced (i.e., @56) a

program log (figure 9) which identified various characteristics of each of the mass

medium programs which had been outputted and broadcast by said station; said

logger produced said log in response to identification tag data which was received

in the programming supplied by "the various input sources" (see lines 26-28 of

column 5) wherein the term "the various input sources" was defined as having

included both the local source and said network source4 (see lines 1 and 2 of

column 5).

III. With respect to the limitations of claim 3:

The following exemplifies one of the ways in which the recitations of claim 3 are met by

the showing of Flynn:

⁴ The <u>Flynn</u> patent never provided a detailed description as to how how the network programming were to have been

tagged, transmitted, and/or logged by the described broadcasting system. However, the examiner maintains that implementing the

circuitry which was required for tagging, transmitting and logging the network programming was notoriously well known in the art.

The examiner notes that the lack of such details in the Flynn patent seems to suggest that Flynn himself assumed such

implementations to have been within the level of one skilled in the art.

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A) Lines 4 and 5 of claim 3 recite a step in which mass medium programming signal was received and then was communicated to a storage device. Lines 16 and 17 of claim 3 recite a step in which the programming signal was stored at said storage device along with a first instruct signal.

In Flynn, the local program signals were described as having been stored, along with control signals (i.e., the cueing and tag data), at storage devices 24 and 34 of figure 1. To provide such storage, the stored local program signals must have been "received" by the station, must have been "communicated" to the recording devices 24 and 34, and must have been "stored" at said recording devices 24 and 34; i.e., this would have been true even if the recording mediums 28 and 38 represented pre-recorded mediums that were manually received, manually communicated, and manually stored. The recited "first instruct signal(s)" is met by the control signals described in Flynn.

B) Lines 6-8 of claim 3 recite a step in which one or more instruct signals were received. Lines 6-8 of claim 3 also state that said one or more instruct signals were effective to instruct user stations to transmit the received programming signal according to a transmission schedule and to log the transmission of said signal.

In <u>Flynn</u>, each station received the "preset program" which was used to program sequencer 14 and thereby controlled how the received local program signals were transmitted. Each station also received control signals (i.e. the tag data) which were used by the logger of the station in order to have logged the

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transmission of said program signals. The "preset program" and the "tag data" in Flynn correspond to the recited "one or more instruct signals" of lines 6-8.

C) Lines 9-15 of claim 3 recite various processing that are performed on the "first one of the one or more instruct signals". The examiner notes that the selection steps of lines 9-13 appear to be implicitly required by the limitations of lines 14 and 15 and thus the recitations of lines 9-13 appear to add nothing to the limitations of lines 14 and 15. Specifically, lines 9-15 of claim 3 taken together only appear to require that the "first instruct signal" be communicated at a <u>selected</u> time <u>or</u> to a <u>selected</u> memory location.

In <u>Flynn</u>, the first instruct signal was "communicated" at a selected time (i.e. the tag data was communicated to the logger at a time which was selected by the preset program contained within sequencer 14).

- D) With respect to the preamble of the claim 3, the examiner maintains that it would have been obvious to one skilled in the art that the broadcast station in Flynn represented one of a plurality of "potential user station." For example, the station in Flynn clearly had the "potential" being programmed by the station's user/operator in order to broadcast programming in the desired order/sequence.
- 14. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Flynn</u> for the same reasons that were set forth in paragraph 13 of this Office action. The following is noted:

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a) With respect to claim 4, it is noted that the tag data in <u>Flynn</u> was embedded within the program data [see lines 45-48 of column; lines 42-48 of column 3; and lines 26-30 of column 5];

- b) With respect to claim 5, note that the tag data in <u>Flynn</u> identified the source of the program [see: lines 5-13 of column 3; lines 20-30 of column 5; and figure 4];
- c) With respect to claims 6 and 7, note that the embedded data in <u>Flynn</u> includes synchronization data and cueing signals for determining where and when to locate character data signals and/or stored programming [see lines 38-48 of column 3].
- 15. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "Videocassette Banks Automate Delayed Satellite Programming" by Chiddix.

1. The showing of **Chiddix**:

The Chiddix publication describes a TV program "storage device" which operated to impart a desired delay onto received network TV programming. The storage device delayed the network TV programming by receiving and storing the programming at a first moment in time and then by retrieving and outputting said stored programming at a second moment in time; i.e. wherein the time difference between the first and second moments in time represented said "desired delay". In practice, said storage device was typically used at local television stations for the purpose of delaying received network TV programming for the period of time that was required to compensate said received network programming for factors which affected the timing of said programming [see: the first full paragraph in the second column on page 38; and lines 7-22 in the third column of

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page 39]. In a described embodiment, the disclosed storage device compensated the received network programming for affects caused by time zone differences between network and local stations [see the first full paragraph in the second column on page 38].

As shown in figure 1, the disclosed storage device comprised a bank of processor controlled videocassette machines which stored and retrieved the network programming via a magnetic tape recording medium. In applications where the local television station comprised circuitry for inserting local programming (ie "commercials") into the delayed network programming in response to received network cueing signals, said videocassette machines were configured to also store and retrieve the cueing signals that were transmitted with said network programming thereby delaying the received cueing signals and network programming for exactly the same periods of time; ie thus, ensuring that the timing relationship between said received network programming and said received network cueing signals was maintained at the output of said delay device [see lines 33-37 in the third column of page 39].

The following is noted:

a) The storage device in <u>Chiddix</u> was explicitly described as having received the broadcasted network programming and the broadcasted network cueing signals from the network broadcast station. Being such, the network broadcast station must have comprised: means for producing network television programs at scheduled times⁵; means for producing the associated network cueing signals at

⁵ With few exceptions (e.g. "news flashes"), TV programming had to be transmitted by local and network television stations according to strict television programming schedules that were created well in advance of the programming's broadcast.

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said scheduled times; and means for simultaneously transmitting said produced network programming and network cueing signals from the network station to said local stations at said scheduled times;

b) In Chiddix, the local stations were described as having inserted the local programming into the stored/reproduced network programming, during rebroadcast of the network programming, in response to the stored/reproduced network cueing signals. Being such, each local station must have comprised: means for detecting the network cueing signals retrieved from the storage device; means for providing the local programming which was to be inserted into the network programming at scheduled times⁵; switching means for actually inserting the provided local programming into the network programming retrieved from the storage device at said scheduled times; and means for broadcasting the combined local and network programming signal provided by the switching means, over a designated TV channel, to a plurality of household TV receiver "stations" served by the local station;

Transmitting television programming according to pre-established transmission schedules was required because it enabled the users of the stations' broadcasts to know what was going to be broadcast and, using this knowledge, to plan how they were going to use the broadcasts. For example: home viewers used distributed program schedules to determine what programming was currently being broadcasted by a station rather than having had physically monitored the station's broadcast; local affiliate stations used such distributed schedules to create their own broadcast schedules dictating what part of the network programming was to have been re-broadcasted by the local station and what part of the network programming was to have been replaced by locally produced programming; etc,...

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c) Chiddix described an embodiment in which the local TV station comprised a CATV headend (SEE lines 33-37 in the third column of page 39). In such an embodiment, said local TV station must have comprised: respective storage devices for delaying the programming from each television network source which needed to have its programming delayed prior to re-broadcast by the headend; respective switching for inserting respective local programming into the received network programming from each network source based on respective network cueing signals; and respective means for re-broadcasting each of the received network programs over a respective one of designated cable TV channels; and d) For the delay device to have been operative so as to have allowed program users to have tailored the program timing according to their needs [see lines 7-11 in the third column on page 39], the desired delay imparted by the delay device must have been selectable by said user (i.e. note the "Time Thumb Wheel Module" shown in figure 1).

2. As applied to claim 8:

- a) The network television programming that was "received" and broadcasted by the transmitter of the network station in <u>Chiddix</u> corresponds to the received programming recited in line 3 of claim 8. This network television programming was also "stored" in the recording device located at the local affiliate station thereby meeting the storing step also recited in line 3 of claim 8.
- b) The network television programming transmitted from the network station in Chiddix was transmitted along with associated cueing signals. These transmitted cueing

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signals were recorded, with said transmitted network programming, on the recording devices located within the local stations. During reproduction from the recording devices, said recorded cueing signals were detected and decoded by unspecified *processing* circuitry (a "processor") located within the local station in order to have instructed the local station: to *effect* the transmission/re-broadcast of the delayed network programming during first scheduled times: and to *effect* the transmission/broadcast of locally produced programming in place of the network programming during second scheduled times. Given the above, it is maintained that the cueing signals of <u>Chiddix</u> correspond to the control signal which was recited in lines 7-9 and lines 12 and 13 of claim 8. The following is noted:

- 1) Lines 10 and 11 of claim 8 recited that the control signal *interacts* with predetermined user data which is potentially different from station to station. In Chiddix, the reproduced cueing signals clearly interacted with locally scheduled programming (i.e. local commercials) wherein the locally scheduled programming had the potential to be different from local station to local station; i.e. in fact, if the local programming was not different between at least some of the local stations, the system disclosed by Chiddix would have served no purpose in that there would have been no need to have inserted commercial programming locally.
- 2) For the network station to have generated the network cueing signal as was described by Chiddix, said network station must have comprised means for generating said cueing signal and means (such as a control panel for receiving

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manual inputs from a network station operator) for receiving instructions as to how and when said cueing signal was to have been generated and broadcasted by said network station. Such generating means inherently performed the receiving and encoding step of lines 4-7.

3. Differences:

Claim 8 differs from the system disclosed by <u>Chiddix</u> only in that claim 8 recites that the "control signal" also effects the station (i.e. the local station in <u>Chiddix</u>) to "log transmission of said program" (i.e. the network programming in <u>Chiddix</u>).

4. State of the Art:

The examiner maintains that the need for a television broadcast station to have generated a log of the television programming which was broadcasted from the station was not only notoriously well known in the art but was often required under the law (i.e. under laws created by the FCC). Numerous systems for automatically creating such required program logs were known at the time of applicant's alleged invention.

5. Obviousness:

The examiner maintains that it would have at least been obvious to one skilled in the art to have provided the local stations in <u>Chiddix</u> with the appropriate circuitry needed for logging the programming which was broadcasted by each local station; i.e. as was often

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required by law. Because the cueing signals in <u>Chiddix</u> controlled what programs were broadcasted by the local stations at any given time, said cueing signals inherently *effected* what programs would have been logged by the logging circuitry. Such meets the logging limitations of lines 6 and 7.

- 16. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "Videocassette Banks Automate Delayed Satellite Programming" by Chiddix for the same reason that was set forth in the preceding paragraph (i.e. 15) of this Office action.
 - A) With respect to claims 9 and 10, the examiner maintains that it would have been obvious to one skilled in the art to have used the cueing signals in <u>Chiddix</u> to caused locally stored information, e.g. such as station identification information, to be overlaid over the re-broadcasted network programming.
 - B) With respect to claim 11, the examiner maintains that it would have been obvious to one skilled in the art for the network television programming in Chiddix to have carried teletext data as was notoriously well known in the art.
- 17. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "Videocassette Banks Automate Delayed Satellite Programming" by Chiddix, for the reason that was set forth in paragraph 15 of this Office action, in view of the publication "The vertical Interval: A General-Purpose transmission Path" by Anderson.

I. The showing of Anderson:

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The Anderson publication evidences that those of ordinary skill in the art knew, at the time of applicant's alleged invention, that the vertical blanking interval of a transmitted television signal comprised "general-purpose transmission path" through which many different types of digital data could be transported [note the title of the publication]. Anderson evidences that those of ordinary skill in the art had recognized that this generalpurpose transmission path could be used so as to have: 1) established a continuous communications network between a network television station and a plurality of affiliate television station whereby addressed information was disseminated from the network station to the plurality of affiliate stations such that the disseminated information was only received by those affiliate stations to which the disseminated information was addressed, wherein the addressed information was described as having represented program log information, program cueing information, routine network messages, and news flashes [see the first paragraph under the heading "Conclusions" on page 82 of the Anderson publication]; 2) carried remote control information which controlled the operation of devices, such as VTRs and video switchers, at remote station locations [see: the second paragraph of the "Abstract" on page 77; and the system of figure 8 of the Anderson publication], and 3) carried other forms of information between television stations such as graphics data, computer data, test signals, etc... [see: the "Abstract" on page 77; and the first paragraph under the heading "Introduction" on page 77 of the Anderson publication].

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II. Obviousness:

Chiddix did not disclose how the cueing signal and the network programming were to have been simultaneously transmitted from the network station to the local station.

However, Anderson evidences that it was well known in the art to have transmitted such a cueing signal by embedding it within the vertical blanking interval of the network programming. Given such a showing, it is maintained that transmitting the cuing signal in Chiddix within the vertical blanking interval of the network programming was, at best, only an obvious choice of design.

18. Claims 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al (U.S. Patent No. 4,388,645) in view of Haselwood et al (U.S. Patent No. 4,025,851).

Regarding claims 13 and 18, Cox et al. (Cox) discloses a system for communicating data or program material from a transmitter station (10) to a plurality of receiver stations (col. 4, line 58), each of said receiver stations includes a broadcast or cablecast data receiver (20), a data storage device (38a-38c), a control signal detector (Fig. 4), a computer or microprocessor (Fig. 4 and col. 8, line 12), and with at least one receiver station further includes a transmitter (24). Each receiver station (Fig. 4) is adapted to detect and respond to one or more instruct signals (Fig. 3), and stores data or program (38a-38c) for subsequent processing. The transmitter station (10) transmits ("transmitting step") time codes ("one or more instruct signals") and pages of programming material ("data or program material") to a plurality of receiver stations (col. 3, lines 27-36 and 66-68 and col. 4, lines 57-58). The data or program "receiving step" and the "transferring step" are inherently steps of the transmitter station (10) since the transmitter station

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transmits both the time codes and the pages of program material (That is, in order for the transmitter station 10 to transmit the program, the data or program must be first received by the sation 10, and in order for the transmitter of the station 10 to transmit the time codes ("one or more instruct signals"), the time codes must be transferred to the transmitter of station 10). The time codes ("one or more instruct signals", see Fig. 3) determine when the program material stored in the memories 38a-38c should be transmitted by comparing the time codes ("a transmission schedule", see Fig. 2) stored in memories 38a-38c. Consequently, the time codes ("one or more instruct signals") shown in Fig. 3 are effective to transmit the pages of program material ("data or program material") according to the time codes shown in Fig. 2 ("a transmission schedule").

Cox differs from claim 2 in that Cox does not specifically disclose the step of logging the transmission of the data or program. However, as taught by Haselwood et al (Haselwood), monitoring the program broadcasted by a broadcasting station is notoriously old and extremely well known in the art of television. Haselwood in col. 2, lines 10-15, and col. 5, line 50 to col. 6, line 5 clearly suggests the step of logging the transmission of the program. Col. 2, lines 10-15 and col. 5, line 50 to col. 6, line 5 also indicates that a program code ("a code designating said signal") can be used for identifying the program which has gone to air. Haselwood in Figs. 2 and 3 further illustrates that the monitoring can be done in either the receiving site or the transmission site. Since both Cox and Haselwood disclose a CATV system, it would have been obvious to an artisan of ordinary skill at the time of the invention to incorporate the logging step of Haselwood into the method of Cox in order to allow the broadcast station to maintain a log of all the

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programs that have gone to air so that the broadcast station can utilize such collected information for the purposes of billing, determining viewing habits of the subscribers, etc.

Regarding claims 14 and 19, the instruct signals are embedded in the vertical blanking interval of a broadcast television signal (col. 3, lines 31-32).

Regarding claims 15; 16, 20 and 21, since the satellite transmitter station is capable of transmitting both the data or program and one or more instruct signals to a plurality of receiver stations (col. 4, line 58), some receiver stations can inherently receive the signals and data or program at the same time and some can inherently receive the signals and data or program at different time.

Regarding claims 17 and 22, the combination of Cox Haselwood further differs from claims 17 and 22 in that it does not disclose that the received data or program in the transmitter station (10) is stored in memory location for a period of time prior to communicate the data or program to the transmitter. Examiner takes Office Notice that storing data or program material in a memory location of a transmitter station for a period of time is well known in the art. For example, Fig. 4 of Cox clearly shows that the received data or program can be stored in a memory location (e.g., 38a-38c) for a period of time prior communicating to the transmitter 24.

Therefore, it would have been obvious to an artisan of ordinary skill at the time of the invention to provide the transmitter station (10) of Cox with a memory or storage unit so that the data not for immediate broadcasting can be stored for a period of time until it's broadcasting time comes.

19. The examiner notes that the art of record has been applied to the claims to the extent of the examiner's understanding in view of the extensive section 112 problems.

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20. A series of interviews were held before prosecution began on this application. Unless identified specifically below in this part of the action, these interviews did not address the merits of any single application, but rather issues that are appropriate to all of the related "Harvey" applications.

The first interview was held on August 13, 1995. It was a personal interview. Attending were one of the applicants, Mr. Harvey, and his attorneys, Messrs. Scott and Woolston. Representing the PTO were Messrs. Godici, Yusko, Orsino, and Groody. Mr. Harvey and his attorneys were informed that because of the large number of related applications, the examination would be performed by a team of examiners. As of the August 1995 interview there existed a problem with some of the applications being charged large entity fees when applicants believed that small entity status was deserved. The PTO has referred this matter to the Office of Assistant Commissioner of Patents, specifically Hiram Bernstein, a petitions attorney. Mr. Harvey's representatives will attempt to resolve this issue through Mr. Bernstein. At this time all of the related cases had not been received in the Group. No examination was planned until at least late October because the team members were managers, and needed to complete other end of fiscal year assignments and all employee performance ratings. The PTO requested that any amendments to the specification, other that to correct continuing status, be delayed. Mr. Harvey's representatives stated that no other amendments to the specification were actually planned. The PTO's goal will be to attempt to reduce the amount of paper passed between applicant and PTO since the cases are related and very difficult to move from cite to cite because of their size. Copies of the prior art only need to be filed once. The PTO will only send newly cited art once.

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Preliminary amendments are being prepared. The PTO however cautioned that the prosecution of the applications will not be delayed until applicants have filed these amendments. The PTO requested a chart establishing any relationships between cases and what parts of applicants' disclosure related blocks of cases were directed to. It was not, at this time, determined whether this chart would become part of the official file. The PTO planned to research this. It was the . PTO's intent to examine related cases simultaneously. The PTO welcomed any claim amendments to include resubmissions of all claims, whether amended or not. Mr. Harvey's representatives were informed that the issue of double patenting was expected to be a major issue.

On November 2, 1995, a telephonic interview was held between Mr. Woolston and Mr. Groody. Mr. Woolston indicated that two prior art statements were being completed, one for cases with a 1987 effective date, the other for cases with a 1981 effective date.

On November 30, 1995, a personal interview was held. Representing applicants were Messrs. Scott, Woolston, and Grabarek. Representing the PTO were Messrs. Yusko, Orsino, and Groody. The content of a simultaneously filed prior art statement was discussed. The PTO's copies of the parent files are missing the non-U.S. patents cited therein. The PTO requested copies of those prior art documents. Applicants gave the PTO a document showing which cases have already been amended. Since this document merely shows the status of any amended application, it has not been made part of the file record since that paper has no bearing on the merits of any issue before the PTO.

A second interview was held on later on November 30, 1995 between Mr. Scott and Mr. Groody. The sole topic discussed was double patenting. The discussion led to no conclusions on whether a double patenting rejections would be made in these applications.

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An interview was held on December 6, 1995 between Mr. Scott and Mr. Groody. The discussion was directed to In re Schneller, 158 USPQ 210 (CCPA) and whether that decision will necessitate a double patenting rejection in any of these cases. Mr Scott was asked whether a terminal disclaimer could be filed in all of the 327 related cases to obviate a possible double patenting rejection in each of these cases over each other. Mr. Scott agreed to consider this.

An interview was held on December 13, 1995 between Mr. Scott and Mr. Groody regarding the terminal disclaimer question above. Mr. Scott proposed filing a terminal disclaimer in about 250 of the 327 cases over each other if the PTO would have each of the about 250 issue within 4 or 6 months of each other. Mr. Groody felt that the PTO would be unwilling to suspend prosecution in some cases just to have other related cases issue close to each other. No agreement was reached.

Two interviews were held between Mr. Scott and Mr. Groody on April 2, 1996. Mr. Scott pointed out that, in parent file 5,233,654, there had been a restriction requirement. After reviewing the file, Mr Groody indicated that there would not be a Schneller double patenting rejection made in any case based on parent patent 5,233,654 and 5,335,277. The action recently sent out in 08/113,329 would be changed to reflect this point. Mr. Scott inquired whether a terminal disclaimer, in these applications, would have to be filed for all of the four Harvey patents (4,694,490; 4,704,725; 4,965,825; 5,109,414). Mr. Groody felt that all four should be disclaimed, if applicants elect to take that approach toward overcoming the double patenting rejections, because of the requirement in terminal disclaimers concerning common ownership. Mr. Scott indicated that in parent patent 4,965,825, there had been a multiplicity rejection. Mr. Groody will order the file, but felt that rejection would not overcome the Schneller double

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patenting rejections since the CCPA did not list this situation as an acceptable reason to file continuing cases. The Court limited it exception to "independent and distinct" claims. Mr. Groody acknowledged that the Board of Appeals may accept the multiplicity argument, but, in the absence of case law on this issue, he would still apply the Schneller rejections.

On June 10, 1996, Mr Scott spoke with Mr. Groody on several topics. Related case 08/397,582 has been withdrawn from issue in Group 2200, and a new action will be mailed containing a double patenting rejection under *In re Schneller*. This application will now be examiner in Group 2600. Mr. Scott questioned whether applicants can withdraw the terminal disclaimer made in 397,582. Mr. Groody was unsure of the answer, but later checked with Mr. Orsino, who informed him that MPEP 1490 controlled.

Mr. Groody still believes that 08/113,329 can be expedited at the Board. Mr. Scott can refer to the appeal brief to be filed in that case in responding to any application having a Schneller double patenting rejection.

A telephone interview was held on June 12, 1996 between Mr. Thomas Woolston and Marc E. Bookbinder representing the PTO. For S.N. 08/448,116, Mr. Woolston indicated that the supplemental preliminary amendment of Nov. 13, 1995 was incomplete and that a complete version of such would be filed shortly to perfect the submission as originally intended. Mr. Woolston also indicated that he intended to file a second supplemental preliminary amendment in this case bringing the total number of claims to 37.

Mr. Bookbinder indicated that the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings. Mr.

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Woolston stated that such a grouping was available and that he would forward it to the Group as soon as possible.

Mr. Bookbinder requested that each future amendment filed be accompanied by an electronically readable version thereof. Mr. Woolston stated that he could provide a disk to include one or more amendments made to applications as they were filed.

Mr. Woolston stated that he has reviewed actions that have been mailed and that he takes issue particularly with the double patenting rejections and the way In re Schneller has been applied. Mr. Bookbinder suggested that Mr. Woolston contact Mr. Groody of Group 2600 to discuss the particulars of the double patenting rejections since he was the author of those rejections. On November 25, 1996, a telephone interview was held between Mr. Scott and Mr. Groody. Mr. Groody informed Mr. Scott that expedited processing at the Board for 113/329 would be arranged by the Office. No action on applicants' part was necessary. Applicants no longer had to submit a listing of related cases, since the examiners did not need that. Finally, application serial number 08/397,582, which has been withdrawn from issue, will be examined over all of the art cited in all of the later filed Harvey cases.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Faile whose telephone number is (703) 305-4365.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

ANDREW I. FAILE SUPERVISORY PATENT EXAMINER GROUP 2700

APPENDIX

(Examples of Claim Conflicts between Applications)

Comparison of claim 12 from Serial No. 08/469,626 to claim 24 from Serial No. 08/487,980.

Claim 12

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a. control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

Claim 24

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

- (1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to control a sequence of events;
- (2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and
- (3) transmitting said one or more control signals to said

- control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:
- (1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to decode a portion of a multichannel broadcast or cablecast transmission;
- (2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and
- (3) transmitting said one or more control signals to said

transmitter before a specific time. transmitter before a specific time.

Comparison of claim 24 from Serial No. 08/488,620 to claim 23 from Serial No. 08/477,660.

Claim 24

A method of controlling a computer to communicate a television signal in a television network, said network *having* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming said receiver station to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

Claim 23

A method of controlling a computer to communicate a television signal in a television network, said network comprised of a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming a processor to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device;

storing said unit of software on said file storage medium;

executing a technique for communicating a file stored on a disk associated with a computer; and

communicating said television signal in accordance with said technique.

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device and

storing said unit of software on said file storage medium,

thereby to enable said computer to execute a technique for communication a file stored on a disk associated with a computer and

communicate said television signal in accordance with said technique.

Comparison of claim 23 from Serial No. 08/488,032 to claim 58 from Serial No. 08/451,746.

Claim 23

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

- (1) inputting a viewer's or participant's reaction at a subscriber station;
- (2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of subscriber input;
- (3) determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction;
- (4) processing an instruct signal which is effective to coordinate data processing with communication or presentation of television programming at said

Claim 58

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

- (1) inputting a viewer's or participant's reaction at a subscriber station;
- (2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of *said specific* subscriber input;
- (3) determining the presence of said *specific* subscriber input at said subscriber station by processing said viewer's or participant's reaction;
- (4) processing an instruct signal which is effective to receive, generate, or present output to supplement television

subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing. programming at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing. Comparison of claim 47 from Serial No. 08/469,106 to claim 46 from Serial No. 08/487,649.

Claim 47

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A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

- (1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to implement a scheme for generating a control signal and delivering the instruct signal to a transmitter;
- (2) receiving at said transmitter station one or more

Claim 46

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

- (1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to select a broadcast or cablecast signalling scheme and generate a signal in consequence of said selected broadcast or cablecast signalling scheme and delivering the instruct signal to a transmitter;
 - (2) receiving at said

- control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and
- (3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.
- transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and
- (3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

Comparison of claim 11 from Serial No. 08/477,805 to claim 25 from Serial No. 08/449,523.

Claim 11

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A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

Claim 25

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter;

- (2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of a specific one or more of said plurality of units of television programming; and
- (3) transmitting said one or more control signals to said transmitter before a specific time.

- its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:
- (1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter, said unit of television programming having an instruct signal which is effective at the one or more receiver stations to implement a television signalling scheme;
- (2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of said unit of television programming; and
- (3) transmitting said one or more control signals to said transmitter before a specific time.

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